

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL WEATHER SERVICE  
NATIONAL METEOROLOGICAL CENTER

OFFICE NOTE 235

Generating Codes for a Complete Spectral System  
with Arbitrary Vertical and Horizontal Resolution

Joseph Sela  
Development Division

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This is an unreviewed manuscript, primarily  
intended for informal exchange of information  
among NMC staff members.

This office note documents the steps involved in creating codes and fixed fields necessary for the computer implementation of a spectral forecast system with arbitrary vertical and horizontal resolution. The only limitation on the horizontal resolution is the requirement that #JCAP, the maximum zonal wave number in the rhomboidal truncation, be even.

A net of 8 computer jobs creates fixed fields, executable load modules and a sample forecast to 24H, including post-processing the sigma data to mandatory pressure surfaces. The object codes generated by this system are not as fast as the operational codes, a consequence of using generalized Fast Fourier Transforms subroutines. For #JCAP=24 or #JCAP=30, optimized FFTS are available and can be included in a manner described in Office Note 234.

The listings provided in this note are for #JCAP=16 and 6 layers. The resolution is controlled by the first member in the input to the PLI pre-processor, DCL16K06. This member reflects the desired resolution by specifying numerical values to the # variables appearing in the source code. A listing of this member is provided for reference.

The vertical resolution is determined by subroutine SETSIG and variables:

```
#LEVS = number of model layers  
#LEVPL = number of model layers + 1  
#LEVML = number of model layers - 1  
#LEVH = number of model layers bearing moisture  
#LEVHML = number of model layers bearing moisture - 1
```

Array DEL is subroutine SETSIG specifies the sigma thickness of the model's layers. The values of DEL(#LEVS) should be reset whenever the vertical resolution is changed. Subroutines SETSIG is presented for reference. The horizontal resolution is determined by subroutines FFT99GEN FFT99M and variables:

```
#JACP = max. zonal wave number  
#JCAP1 = " " " " + 1  
#JCAP2 = " " " " + 2  
#LN = number of spectral coeffs. per scalar field = #JCAP1x#JCAP1  
#LNUV = number of spectral coeffs. per vector field = #JCAP1x#JCAP2  
#Latg = number of Gaussian latitudes  
#Latg2 = number of Gaussian latitudes/2  
#LONF = number of Gaussian points per latitude circle  
#HLONF1= #LONF/2 + 1  
#LONFP2= #LONF + 2  
#LONF2 = 2x#LONF
```

Member DCL16K06 is composed of three sections, member YSCHAR, a group of specific values for the aforementioned variables and member YSCALC.

Member YSCHAR declares most of the variables as CHAR and specifies most of the truncation independent variables. Member YSCHLC computes additional variables from previously defined values.

Description of the net creating a tape with data and FORTRAN Programs.

#### 1. Job WWYSF123

- a) copy Hough function's frequencies to File 1 of tape
- b) compute spectral topography and write formatted coefficients to File 2 of tape.

c) compute Gaussian grid of drag coefficients, 12 monthly sea surface temperature normals, and write into File 3 of tape. The method of writing, formatted or unformatted, is controlled by subroutine RDWRT.

In steps b and c PROC YSXCLGAB is used. This PROC is a PLL pre-processor followed by a COMPILE, LKED and GO steps. The PROC listing is included for reference.

2. Job WWYSFY

This job writes the FORTRAN code of program SMYLN16 into File 4. In addition load module SMYLN16 is complied and placed on a load library.

3. Job WWYSF5

This job writes the FORTRAN code of program SMI1606G into File 5. It also creates load module SMI1606G in the load library.

4. Job WWYSF6

This job creates the FORTRAN code of program SMNM1606 and writes it into File 6. This code computes the normal modes for the specified resolution and writes them into FT80F001. The number of vertical modes is specified by the input to FT05F001. In this example 4 vertical modes are specified. The load module of this program is placed in the load library, for future use. Note that FT80F001 is a temporary file used for testing only.

5. Job WWYSF7

This job creates the FORTRAN code of program SMF16006G writes it into File 7 and creates load module SMFI606G.

6. Job WWYSF8

As in (5) for program SMP1606X.

## 7. Job WWYSF9

As in (5) for program FORUNFOR. This program should be used when executing the model on a computer installation other than a 360/195. This code will read formatted data and write unformatted files for subsequent use by the various programs.

## 8. Job WWYSF10

This job is a sample execution of a 24H forecast and consists of the following steps.

### HUFCOF, Program SMHUFCF

Reads Hough function data from FT04F001 and writes Hough function data for 12 mandatory pressure levels in FT10F001. The program "sums" the empirical orthogonal pressure functions out of the general Hough functions representation.

### YLN, Program SMYLN16

Computes spherical harmonics from data in FT10F001 and writes them on FT11FOOT. Note that the Hough frequencies in FT14F001 are obtained from a permanent file. The same result can be achieved by specifying FT14F001 as File 1 of the tape written in Job WWYSF123.

### FOR1, FORUNFR

Reads FT01F001, unformatted spectral coefficients or pressure, writes into FT02F001 formatted data.

### FOR2, FORUNFOR

Recreates unformatted spectral coefficients on pressure in FT02F001.

### FOR3, FORUNFOR

Creates unformatted drag and sea surface temperature in file DRAGSST from File 3 on tape created in job WWYSF123.

Steps FOR1, FOR2, FOR3 can be deleted when executing job WWYSF10 on the 360/195 computer.

SMI, Program SMI1606G

This is the pressure to sigma step. Spherical harmonic coefficients on mandatory pressure levels are read from FT11F001, SMCFYLN, spherical harmonic data on sigma is written into file FT18F001. Note that topography coefficients are read from File 2 on the tape created in job WWYSF123.

GETMOD, Program SMNM1606

This step computes the normal modes and writes them into FT80F001. In this execution 2 vertical modes are requested.

FCST12, Program SMF1606G

In this step a 12H forecast is created from initial data in FT18F001. The initialized data is written into FT19F001 and two adjacent time levels ( $\tau$  and  $\tau-1$ ) are written into FT20F001 and FT21F001 respectively. The model reads the normal modes from file NORMOD and the sea surface temperature and drag from file DRAGSST.

FCST24, Program SMFT606G

As in FCST12 but without normal mode initialization. The 24H forecast is written into files FT22F001 and FT23F001 for possible continuation of the run.

POST24, Program SMP2406X

This step transforms sigma data to data on 12 mandatory pressure levels. In this example the post processor does not write out any output, spectral coefficients on pressure or random access file, as

is done in NMC's operations. Office Note 234 describes the creation of operational post processing codes capable of saving the output data on permanent files.

#### General Remarks

The various spectral codes are controlled through the PARM field in the EXEC statement. The specification of parameters is described in Office Note 231. The example given in Job WWYSF10 transfers the PARM field through input file FT05F001. This departure from NMC's operations is intended to demonstrate the execution of the spectral system on any computer. Deleting FT05F001 and placing the PARM field in the EXEC statements requires compiling the various programs according to specifications given in Office Note 234.

In creating the "portable" version presented in this note certain W3LIB subroutines were faked to permit execution on any computer installation. These subroutines are used for data management and do not interfere with the computational aspects of the system. Should a version containing the W3LIB codes be desired, member W3SUBS must be deleted from the input to the PLI preprocessor and a LKED statement added to codes containing this member.

member DCL16 K06

```
% INCLUDE YSCHAR ;
% #FILTA = '0.92' ;
% #LEVH = '4' ;
% #LEVHM1 = '3' ;
% #JCAP = '16' ;
% #JCAP1 = '17' ;
% #JCAP2 = '18' ;
% #LN = '289' ;
% #LNUV = '306' ;
% #LONF = '50' ;
% #HLONG1 = '26' ;
% #LCNFP2 = '52' ;
% #LONF2 = '100' ;
% #LATG2 = '21' ;
% #LATG = '42' ;
% #LEVMI='5';
% #LEVS='6';
% #LEVP1='7';
% INCLUDE YSCALC ;
```

Note include members YSCHAR , YSCALC

member ysCHAR

```
% DCL #NGRID CHAR, #IPOLE CHAR, #IMAX CHAR, #NGRID1 CHAR ;
%#NGRID='49'; %#IPOLE='25'; %#IMAX='24'; %#NGRID1='50';
% DCL
#FILTA      CHAR,
#LAG2P1     CHAR,
#DT          CHAR,
#DISPKO     CHAR,
#DISPKF     CHAR,
#UNBLOCK   CHAR,
#NINT       CHAR,
#LEVH       CHAR,
#LEVHMI    CHAR,
#JCAP       CHAR,
#JCAP1      CHAR,
#JCAP2      CHAR,
#LN          CHAR,
#LNUV       CHAR,
#LONF       CHAR,
#HLONGF    CHAR,
#LONFP1    CHAR,
#LONF2     CHAR,
#LATG2      CHAR,
#LATG       CHAR,
#LEVS       CHAR,
#LEVMI     CHAR,
#LEVP1      CHAR,
#MAXDT     CHAR,
#GRAV       CHAR,
#A          CHAR,
#R          CHAR,
#CP         CHAR,
#LQTDZ     CHAR,
#KTE        CHAR,
#KDI        CHAR,
#KZE        CHAR

;%#DT          = '1200.' ;
;%#DISPKO      = '2.5E-4' ;
;%#DISPKF      = '1.E-5' ;
;%#UNBLOCK    = '2.2E+5' ;
;%#NINT        = '60' ;
;%#MAXDT      = '19' ;
;%#GRAV        = '9.8' ;
;%#A           = '6370000.' ;
;%#R           = '287.05' ;
;%#CP          = '1005.' ;

% DCL #K CHAR, #KP1 CHAR, #KM1 CHAR, #N CHAR, #NN CHAR ;
% #K = '13' ;
% #KP1 = '14' ;
% #KM1 = '12' ;
% #N = 2 * #KM1 + #K + 1 ;
DCL #INCR CHAR, #NBUFF CHAR, #N1 CHAR, #N2 CHAR, #N3 CHAR ;
DCL #INCRP CHAR, #MBUFF CHAR, #M1 CHAR, #M2 CHAR, #M3 CHAR ;
DCL #M4 CHAR, #N4 CHAR ;
DCL #KPMAX CHAR ; % #KPMAX = '15' ;
DCL #FINAL CHAR ; % #FINAL = '1' ;
```

member ysCALC

```
%#LAG2P1      = #LATG2+1 ;
%#LQTDZ      = #LN * (3*#LEVS+1) ;
%#KTE        = #LN + 1 ;
%#HLCNF      = #LCNF/2 ;
%#KDI        = #LN + #LN*#LEVS + 1 ;
%#KZE        = #LN + 2*#LN*#LEVS + 1 ;
% #NN = 2 * #LEVMI + #LEVS ;
% #INCR = #LONF * #LEVS ;
% #NBUFF = #INCR*4 + #LONF*2 ;
% #N1        = #INCR + 1 ;
% #N2        = #N1 + #INCR ;
% #N3        = #N2 + #INCR ;
% #N4 = #N3 + #INCR ;
% #MBUFF      = #LONF * 68 ;
% #INC RP     = #LONF * 15 ;
% #M1        = #INCRP + 1 ;
% #M2        = #M1 + #INCRP ;
% #M3        = #M2 + #INCRP ;
% #M4 = #M3 + #INCRP + #LONF*2 ;
%DCL #JSEV CHAR, #JSOD CHAR, #JVEV CHAR, #JVOD CHAR,
     #LNEV CHAR, #LNOD CHAR, #LNUVEV CHAR, #LNUVOD CHAR ;
% #JSEV= #JCAP/2+1 ;
% #JSOD= #JCAP/2 ;
% #JVEV= #JCAP/2+1 ;
% #JVOD= #JCAP/2+1 ;
% #LNEV= #JSEV*#JCAP1 ;
% #LNOD= #JSOD*#JCAP1 ;
% #LNUVEV= #JVEV*#JCAP1 ;
% #LNUVOD= #JVOD*#JCAP1 ;
%DCL #J3 CHAR ; % #J3= 3*#JCAP1 ;
%DCL #NS CHAR ; % #NS= 2*#JSEV+#JSOD ;
%DCL #NA CHAR ; % #NA= 2*#JSOD+#JSEV ;
```

```

SUBROUTINE SETSIG (CI, SI, DEL, SL, CL, RPI)
DIMENSION CI(#LEVPI), SI(#LEVPI),
1 DEL(#LEVS), SL(#LEVS), CL(#LEVS), RPI(#LEVMI)
PRINT 98
98 FORMAT (1HO, 'BEGIN SETSIG')
CI(1) = 0.
DO 54 K=1,#LEVS
DEL(K)=1./#LEVS.
54 CI(K+1)=CI(K)+DEL(K)
CI(#LEVPI)=1.
RK = #R / #CP
RK1 = RK + 1.
LEVS=#LEVS
DO 1 L I=1,#LEVPI
1 SI(LI) = 1. - CI(LI)
DO 3 LE=1,#LEVS
DIF = SI(LE)**RK1 - SI(LE+1)**RK1
DIF = DIF / (RK1*(SI(LE)-SI(LE+1)))
SL(LE) = DIF**(1./RK)
CL(LE) = 1. - SL(LE)
3 CONTINUE
C COMPUTE PI RATIOS FOR TEMP. MATRIX
DO 4 LE=1,#LEVMI
4 RPI(LE) = (SL(LE+1)/SL(LE))**RK
DO 5 LE=1,#LEVPI
5 PRINT 100, LE, CI(LE), SI(LE)
100 FORMAT (1H , 'LEVEL=', I2, 2X, 'CI=', F6.3, 2X, 'SI=', F6.3)
CONTINUE
5 PRINT 97
97 FORMAT (1HO)
DO 6 LE=1,#LEVS
6 PRINT 101, LE, CL(LE), SL(LE), DEL(LE)
101 FORMAT (1H , 'LAYER=', I2, 2X, 'CL=', F6.3, 2X, 'SL=', F6.3, 2X,
1 'DEL=', F6.3)
CONTINUE
PRINT 102, (RPI(LE), LE=1,#LEVMI)
102 FORMAT (1HO, 'RPI=', #LEVMI(F6.3,2X))
PRINT 99
99 FORMAT (1HO, 'END SETSIG')
% INCLUDE YSCHECK;
RETURN
END

```

```

//YSXCLG12 PROC EXPGM=IFEAAB,EXREGN=256K,EXPDECK=NODECK,
//          EXPMAP=NOMAP,EXPLO=NOIL,XL*,EXPSSIZE=MAX,EXPXREF=NOXREF,
//          EXPOLST=NOLIST,EXPOPT=3,GOREGN=100K,
//          GOF5DD='DDNAME=SYSIN',GOF6DD='SYSOUT=A',
//          GOF7DD='SYSOUT=B',EXPILINE=78,XPTERM=NOTERM
//*
//* NWS      NMC      DEVELOPMENT DIVISION      J. SELA
//* PLI PREPROCESSOR AND FORTRAN CLG
//*
//*          PARAMETER    DEFAULT-VALUE    USAGE
//*
//*          EXPGM        IFEAAB        COMPILER NAME
//*          EXREGN       256K         FORT-STEP REGION
//*          EXPDECK     NODECK        COMPILER DECK OPTION
//*          EXPOLST      NOLIST       COMPILER LIST OPTION
//*          EXPOPT       3            COMPILER OPTIMIZATION
//*          EXPMAP       NOMAP        COMPILER MAP OPTION
//*          EXPSSIZE     MAX          COMPILER CORE
//*          EXPLO        NOIL         MISC. PARAMETER
//*          EXPXREF      NOXREF       COMPILER XREF LISTING
//*          GOREGN       100K         GO-STEP REGION
//*          GOF5DD       DDNAME=SYSIN  GO.FT05F001 OPERAND
//*          GOF6DD       SYSOUT=A     GO.FT06F001 OPERAND
//*          GOF7DD       SYSOUT=B     GO.FT07F001 OPERAND
//*          EXPTERM      NOTERM      COMPILER TERM OPTION
//*          EXPILINE     78           SOURCE LINES PER PAGE
//*
//PLIPRE EXEC PGM=IEMAA,
//          PARME=M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE*
//SYSPRINT DD DUMMY
//SYSUT1   DD UNIT=SYSDA,SPACE=(1024,(60,60)),CONTIG
//SYSUT3   DD DSN=&&PLIOUT,UNIT=SYSDA,
//          SPACE=(80,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD DUMMY
//SYSLIN   DD DUMMY
//SYSLIB   DD DSNEW.NWS.W323.YS.META,DISP=SHR
//          DD DSNEW.NWS.W323.YS.METB,DISP=SHR
//          DD DSNEW.NWS.W323.YS.FORT,DISP=SHR
//*
//FORT EXEC PGM=&EXPGM,REGION=&EXREGN,
//          PARME(&EXPDECK,&EXPOLST,OPTIMIZE(&EXPOPT),&EXPMAP,SIZE(&EXPSSIZE),
//          &EXPLO,&EXPXREF,&EXPTERM,LC(&EXPILINE),GOSTMT)
//STEPLIB   DD DSN=MCS.FORT.ENHANCED.COMPILE,DISP=SHR
//SYSTEM DD SYSOUT=A
//SYSPRINT DD SYSOUT=A,DCB=BLKSIZE=2016
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1)),DCB=BLKSIZE=3465
//SYSUT2   DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//SYSPUNCH DD SYSOUT=B
//SYSLIN   DD DSNE=&LOADSET,DISP=(MOD,PASS),UNIT=SYSDA,
//          DCB=BLKSIZE=3120,SPACE=(CYL,(1,1))
//SYSIN    DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
//LKED EXEC PGM=IEWL,REGION=256K,COND=(4,LT),
//          PARME=LET,LIST,MAP
//SYSPRINT DD SYSOUT=A
//SYSLIB   DD DSN=MCS.FORT.ENHANCED.LTBRARY,DISP=SHR
//          DD DSNE=SYS1.FORTLIB,DISP=SHR
//          DD DSNE=MCS.COMMON.LOAD,DISP=SHR
//          DD DSN=W.NWS.W323.YS.LOAD0,DISP=SHR
//          DD DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//SYSLMOD  DD DSN=&GOSET(MAIN),DISP=(MOD,PASS),UNIT=SYSDA,
//          SPACE=(CYL,(4,,1))
//SYSLIN   DD DSNE=&LOADSET,DISP=(OLD,DELETE)
//          DD DNAME=SYSIN
//SYSTEM DD SYSOUT=A
//MYLIB    DD DSNE=JOBLIB,DISP=SHR
//          DD DSNEW.NWS.W323.YS.LOAD0,DISP=SHR
//GO      EXEC PGM=*&LKED.SYSLMOD,REGION=&GOREGN,COND=(4,LT)
//FT05F001 DD &GOF5DD
//FT06F001 DD &GOF6DD
//FT07F001 DD &GOF7DD
//ANY     DD DSN=&GOSET,DISP=(OLD,DELETE)

```

Proc YSXCLGAB

```

//WWYSF123 JOB (WD23008AC601000,WWB4-D1),ROZWODOSKI,
//          TIME=1,REGION=356K
//**NET ID=E18767,RELEASE=(WWYSF4)
//JOBLIB DD DSN=W.NWS.W323.YS.LOADO,DISP=SHR
//FORMAT PR,DDNAME=,DEST=WWB29
/*
//**** COPY HUF FREQUENCIES
//COPY2 EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=A
//SYSIN DD DUMMY
//SYSUT1 DD DISP=SHR,DSN=NWS.NMC.TEST.SMFIX30(YSNCUT),LABEL=(,,IN)
//SYSUT2 DD DSN=YSNCUT,UNIT=TAPE9,VOL=SER=E18767,LABEL=(01,SL,,OUT),
//        DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS)
/*
//** WRITE TOPOGRAPHY COEFFICIENTS
//** AS FORMATTED RECORDS.
/*
// EXEC YSXCLGAB
//SYSIN DD *
% INCLUDE DCL16K06;
% #LONF='144';
% #HLONF1='73';
% #LONFP2='146';
% #LONF2='288';
% #LATG='72';
% #LATG2='36';
% INCLUDE GLATS; %INCLUDE EPSPLN2;
% INCLUDE FIXZLN;
/*
//GO.FT01F001 DD DSN=W.NWS.W323.MJR.SOURCE2(YGTOPOG),
//          LABEL=(,,IN),DISP=SHR
/*
//GO.FT08F001 DD DSN=ZLN16F2,VOL=SER=E18767,LABEL=(02,SL,,OUT),
//        DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS),UNIT=TAPE9
/*
// THIS PROGRAM TESTS TOPOGRAPHY COEFFICIENTS.
/*
// EXEC YSXCLGAB
//SYSIN DD *
% INCLUDE DCL16K06;
% INCLUDE GLATS; %INCLUDE EPSPLN2;
% INCLUDE FIXZLN;
/*
//GO.FT09F001 DD DSN=ZLN16F2,VOL=SER=E18767,LABEL=(02,SL,,IN),
//        DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS),UNIT=TAPE9
/*
/*
// WRITE GAUSSIAN GRID OF DRAG COEFFICIENTS AND 12 SST FIELDS
// FORMAT OF WRITTEN FIELDS IS SET IN SR. RDWRT
/*
//COPY EXEC NWSCOPYD,DSN=W.NWS.NMC.PROD.FIX*,TFILE='&&FIX'
/*
// EXEC YSXCLGAB
//SYSIN DD *
%INCLUDE DCL16K06;
%INCLUDE GLATS;
%INCLUDE FIXSST;
/*
//GO.FT09F001 DD DSN=W.NWS.W323.MJR.DRAGWF,DISP=SHR
//GO.FT10F001 DD DSN=W.NWS.W323.MJR.SOURCE2(YGTOPOG),
//          LABEL=(,,IN),DISP=SHR
//GO.FT20F001 DD DSN=DRAGSST,VOL=SER=E18767,LABEL=(03,SL,,OUT),
//        DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS),UNIT=TAPE9
//GO.FIXFLD DD DSN=&&FIX,DISP=(OLD,DELETE)
/*

```

```

//WWYSF4 JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//NET ID=E18767,AB=F,NC=D,HC=1,RELEASE=(WWYSF5)
//** SMYLN
//**MAIN LINES=20
//**FORMAT PR,DDNAME=,DEST=WWB29PR1
// EXEC NWSDELT M,D='W.NWS.W323.YS.G16K06',V=SDB090,M=SMYLN16
//COMPR2 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//DDFILE DD DISP=(OLD,KEEP),DSN=W.NWS.W323.YS.G16K06
//SYSUT3 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSUT4 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSIN DD *
COPYOPER COPY OUTDD=DDFILE,INDD=DDFILE
/*
//PLIPRE EXEC PGM=IEMAA,
//          PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),CONTIG
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//          SPACE=(180,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD DSN=SMYLN16,UNIT=TAPE9,VOL=SER=E18767,LABEL=(4,SL,,OUT),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.META,DISP=SHR
//          DD DSN=W.NWS.W323.YS.METB,DISP=SHR
//          DD DSN=W.NWS.W323.YS.W3SR,DISP=SHR
//          DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
% INCLUDE DCL16K06;
% INCLUDE W3SUBS;
% INCLUDE YSHLN;
% INCLUDE YSHLN3;
/*
// EXEC NFORXCL,FXPOPT=3,FXPMAP=MAP,FXPXREF=XREF,FXPLINE=78,
//          FXPL='NOIL,XL',
//          PARM=LKED='LET,LIST,MAP'
//FORT.SYSIN DD DSN=SMYLN16,VOL=SER=E18767,LABEL=(4,SL,,IN),
//          UNIT=TAPE9,DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS)
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G16K06(SMYLN16)
//*DATASET DDNAME=SAVE,J=YES
% INCLUDE PRMFLD;
//*ENDDATASET
//

```

```

//WWYSF5   JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//**NET ID=E18767,AB=F,NC=D,HC=1,RELEASE=(WWYSF6)
//** SMI
//**MAIN LINES=20
//**FORMAT PR,DDNAME=,DEST=WWB29PR1
// EXEC NWSDELTM,D='W.NWS.W323.YS.G16K06',V=SDB090,M=SMI1606G
//COMPR2 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//DDFILE DD DISP=(OLD,KEEP),DSN=W.NWS.W323.YS.G16K06
//SYSUT3 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSUT4 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSIN DD *
COPYOPER COPY OUTDD=DDFILE,INDD=DDFILE
/*
//*
//PLIPRE EXEC PGM=IEMAA,
//      PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),CONTIG
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//      SPACE=(80,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD DSN=SMI1606G,UNIT=TAPE9,VOL=SER=E18767,LABEL=(5,SL,,OUT),
//      DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.META,DISP=SHR
//      DD DSN=W.NWS.W323.YS.METB,DISP=SHR
//      DD DSN=W.NWS.W323.YS.W3SR,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
% INCLUDE DCL16K06;
% INCLUDE W3SUBS;
% INCLUDE GPRENODI;
% INCLUDE GHCIIGGLN;
% INCLUDE JSPTOSIG;
% INCLUDE SETSIG6E;
% INCLUDE YSPILNB ;
% INCLUDE GLATS;
% INCLUDE LOWTMP;
% INCLUDE YSMINV;
% INCLUDE FFT99M;
% INCLUDE FFT99GEN;
% INCLUDE UVDZ99; % INCLUDE PLNDER;
/*
// EXEC XFORXCL,FXPOPT=3,
//      FXPTERM=TERM,
//      FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP'
//FORT.SYSIN DD DSN=SMI1606G,VOL=SER=E18767,LABEL=(5,SL,,IN),
//      UNIT=TAPE9,DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS)
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G16K06(SMI1606G)
//*DATASET DDNAME=SAVE,J=YES
% INCLUDE PRMFLD;
//ENDDATASET
//
```

```

//WWYSF6   JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//**NET ID=E18767,AB=F,NC=D,HC=1,RELEASE=(WWYSF7)
//**MAIN LINES=20
//**FORMAT PR,DDNAME=,DEST=WWB2 9PR1
// EXEC NWSDELTM,D=W.NWS.W323.YS.G16K06*,V=SDB090,M=SMNM1606
//COMPR2 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//DDFILE DD DISP=(OLD,KEEP),DSN=W.NWS.W323.YS.G16K06
//SYSUT3 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSUT4 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSIN DD *
COPYOPER COPY OUTDD=DDFILE,INDD=DDFILE
/*
//PLIPRE EXEC PGM=IEMAA,
//      PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60),,CONTIG)
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//      SPACE=(180,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD DSN=SMNM1606,UNIT=TAPE9,VOL=SER=E18767,LABEL=(6,SL,,OUT),
//      DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.META,DISP=SHR
//      DD DSN=W.NWS.W323.YS.METB,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
% INCLUDE DCL16K06;
% INCLUDE SETSIG6E;
% INCLUDE CALCMODS;
% INCLUDE CALCMODV;
% INCLUDE CALCMODH;
% INCLUDE AMHMTM;
% INCLUDE BMCM;
% INCLUDE YSMINV;
% INCLUDE W3FA03;
% INCLUDE EIGCCDP;
/*
// EXEC XFORXCLG,FXPOPT=3,
//      FXPLINE=78,FXPL='XL',PARM,LKED='LET,LIST,MAP'
//FORT.SYSIN DD DSN=SMNM1606,VOL=SER=E18767,LABEL=(6,SL,,IN),
//      UNIT=TAPE9,DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS)
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G16K06(SMNM1606)
//GO.FT05F001 DD *
04
/*
//GO.FT80F001 DD DSN=&&NORMOD,DISP=(NEW,PASS),UNIT=SYSDA,
//      SPACE=(TRK,(200,5)),
//      DCB=(RECFM=VST,LRECL=1000,BLKSIZE=1004,DSORG=PS)
//

```

```

//WWYSF7 JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//*NET ID=E18767,AB=F,NC=D,HC=1,RELEASE=E(WWYSF8)
//** SMF
//**MAIN LINES=20
//**FORMAT PR,DDNAME=,DEST=WWB29PR1
// EXEC NWSDELTM,D='W.NWS.W323.YS.G16K06',V=SDB090,M=SMF1606G
//COMPR2 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//DDFILE DD DISP=(OLD,KEEP),DSN=W.NWS.W323.YS.G16K06
//SYSUT3 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSUT4 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSIN DD *
COPYOPER CCPY OUTDD=DDFILE,INDD=DDFILE
/*
//PLIPRE EXEC PGM=IEMAA,
//      PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),,CONTIG
//SYSUT3 DD DSN=&PLIOUT,UNIT=SYSDA,
//      SPACE=(80,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD DSN=SMF1606G,UNIT=TAPE9,VOL=SER=E18767,LABEL=(7,SL,,OUT),
//      DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.META,DISP=SHR
//      DD DSN=W.NWS.W323.YS.METB,DISP=SHR
//      DD DSN=W.NWS.W323.YS.W3SR,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
% INCLUDE DCL16K06;
% #DT='1800.';
% #FILTA      ='0.92' ;
% INCLUDE W3SUBS;
% INCLUDE GCOMINI;
% INCLUDE GMMAIN;
% INCLUDE GIO;
% INCLUDE GLOOP;
% INCLUDE GFIDI;
% INCLUDE GWATER;
% INCLUDE GLATS;
% INCLUDE SETSIG6E;
% INCLUDE AMHMTM;
% INCLUDE BMCM;
% INCLUDE FILTDAMP;
% INCLUDE SICKD;
% INCLUDE SIBCKD;
% INCLUDE LRGSCL;
% INCLUDE CONVEC;
% INCLUDE FIXTET;
% INCLUDE NPMSTADB;
% INCLUDE NPSATVAP;
% INCLUDE NPSATVP1;
% INCLUDE PRINTA;
% INCLUDE YSMINV;
% INCLUDE MINMAX;
% INCLUDE YSPLNB;
% INCLUDE YSPLNF;
% INCLUDE FFT99GEN;
% INCLUDE FFT99M;
/*
// EXEC XFORXCL,FXPOPT=3,
//      FXPTERM=TERM,
//      FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP'
//FORT.SYSIN DD DSN=SMF1606G,VOL=SER=E18767,LABEL=(7,SL,,IN),
//      UNIT=TAPE9,DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS)
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G16K06(SMF1606G)
//*DATASET DDNAME=SAVE,J=YES
% INCLUDE SHOWHR; % INCLUDE PRMFLD;
//*ENDDATASET
//
//

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//WYSF8 JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K 00000
// *NET ID=E18767,AB=F,NC=D,HC=1,RELEASEE=(WYSF9) 00000
// * SMP 00000
// *MAIN LINES=20 00000
// *FORMAT PR,DDNAME=,DEST=WWB25PR1 00000
// EXEC NWSDELTM,D=W.NWS.W323.YS.G16K06,V=SDB090,M=SMP1606X 00000
// COMPRT2 EXEC PGM=IEBCOPY 00000
// SPRINT DD SYSOUT=A 00000
// DDFILE DD DISP=(OLD,KEEP),DSN=W.NWS.W323.YS.G16K06 00000
// SYSUT3 DD UNIT=SYSDA,SPACE=(TRK,(3)) 00000
// SYSUT4 DD UNIT=SYSDA,SPACE=(TRK,(3)) 00000
// SYSIN DD * 00000
COPYOPER COPY OUTDD=DDFILE,INDD=DDFILE 00000
/*
// *PLTPRE EXEC PGM=IEEMAA, 00000
// PARM='M,NS,NL0,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK' 00000
// SPRINT DD DUMMY 00000
// SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),CONTIG 00000
// SYSUT3 DD DSNE=&PLIOUT,UNIT=SYSDA, 00000
// SPACE=(80,(12000,500)),DISP=(NEW,PASS) 00000
// SYSPUNCH DD DSN=SMP1606X,UNIT=TAPE9,VOL=SER=E18767,LABEL=(8,SL,,OUT), 00000
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS) 00000
// SYSLIN DD DUMMY 00000
// SYSLIB DD DSN=W.NWS.W323.YS.META,DISP=SHR 00000
// DD DSN=W.NWS.W323.YS.METB,DISP=SHR 00000
// DD DSN=W.NWS.W323.YS.W3SR,DISP=SHR 00000
// DD DSN=W.NWS.W323.YS.FORT,DISP=SHR 00000
// SYSIN DD *
% INCLUDE DCL16K06: 00000
% #KPMAXE=12: 00000
%INCLUDE W3SUBS: 00000
%INCLUDE W3FB01: %INCLUDE W3FC10: %INCLUDE W3FM07: %INCLUDE W3FT05: 00000
    SUBROUTINE OPWRCL (F, FP, ITYPE, LEVEL, IGRID, IOPEN, IWRITE, 00000
    1 ICLOSE, MAP, CNST, IFCN, INTRVS) 00000
CCC THIS IS A TRUNCATED VERSION OF THE OPERATIONAL SUBROUTINE 00000
CCC IT REMOVES CALLS TO W3LIB SUBS. 00000
CCC WRITE OUTPUT FIELDS FROM THIS SUBROUTINE 00000
COMMON HOURF, IDATE(4) 00000
DIMENSION F(1),FP(1),CNST(4),KTBL(5) 00000
DATA KTBL/65,1,1,0,65/ 00000
LGTH=65*65 00000
IF(ICLOSE.EQ.1)RETURN 00000
MAP=0 00000
IF((ITYPE.EQ.1).AND.(LEVEL.EQ.4)) MAP=1 00000
IF(MAP.EQ.0)RETURN 00000
IF(IFCN.NE.1)GO TO 10 00000
CALL MINMAX(F,LGTH,CNST,SMIN,SMAX,IFCN,INTRVS) 00000
10 CONTINUE 00000
CALL GRDPRT(F,KTBL,CNST,ITITLE,1,1) 00000
IF(IFCN.EQ.1) WRITE(6,720) CNST 00000
IF(IFCN.NE.1) WRITE(6,730) CNST 00000
720 WRITE(6,740) HOURF, IDATE 00000
730 FORMAT(20X,'CNST SUPPLIED',4(2X,E14.7)) 00000
740 FORMAT(20X,'CNST CALCULATED',4(2X,E14.7)) 00000
RETURN 00000
END 00000
%INCLUDE PGLOPOX: 00000
%INCLUDE SIGTOM: 00000
%INCLUDE GETRHEX: 00000
%INCLUDE SLOLA1: 00000
%INCLUDE GLATS: 00000
%INCLUDE UVZ99: %INCLUDE PLNDR: 00000
%INCLUDE YSPLNB: 00000
%INCLUDE YSPLNF: 00000
%INCLUDE YSMINV: 00000
%INCLUDE YSGRID: 00000
%INCLUDE QPFINT: 00000
%INCLUDE GGPOLR: 00000
%INCLUDE MINMAX: 00000
%INCLUDE SUBGRD: 00000
%INCLUDE FFT99GEN: 00000
%INCLUDE FFT99M: 00000
%INCLUDE FFS25GEN: %INCLUDE TRIGRCOS: 00000
/*
EXEC XFORXCL,FXPOPT=3, 00000
  FXPTERM=TERM, 00000
  FXPLINE=78,FXPL=XL,PARM=LKED='LET,LIST,MAP' 00000
//PORT.SYSIN DD DSN=SMP1606X,VOL=SER=E18767,LABEL=(8,SL,,IN), 00000
// UNIT=TAPE9,DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS) 00000
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G16K06(SMP1606X) 00000
// *DATASET DDNAME=SAVE,J=YES 00000
% INCLUDE SHOWHR: % INCLUDE PRMFLD: 00000
// *ENODATASET 00000

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//WWYSF9   JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
///*NET ID=E18767,AB=F,NC=D,HC=1,RELEASE=(WWYSF10)
//*FORMAT PR,DDNAME=,DEST=WWB29
// EXEC NWSDELTM,D='W.NWS.W323.YS.G16K06',V=SDB090,M=FORUNFOR
//COMPR2 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//DDFILE DD DISP=(OLD,KEEP),DSN=W.NWS.W323.YS.G16K06
//SYSUT3 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSUT4 DD UNIT=SYSDA,SPACE=(TRK,(3))
//SYSIN DD *
COPYOPER COPY OUTDD=DDFILE,INDD=DDFILE
/*
//PLIPRE EXEC PGM=IEMAA,
//      PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60),,CONTIG)
//SYSUT3 DD DSN=&PLIOUT,UNIT=SYSDA,
//      SPACE=(80,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD DSN=FORUNFOR,UNIT=TAPE9,VOL=SER=E18767,LABEL=(9,SL,,OUT),
//      DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.META,DISP=SHR
//      DD DSN=W.NWS.W323.YS.METB,DISP=SHR
//      DD DSN=W.NWS.W323.YS.W3SR,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
% INCLUDE DCL16K06;
% INCLUDE FIXUNFOR;
/*
// EXEC XFORXCL,FXPOPT=3,
//      FXPTERM=TERM,
//      FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP'
//FORT.SYSIN DD DSN=FORUNFOR,VOL=SER=E18767,LABEL=(9,SL,,IN),
//      UNIT=TAPE9,DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS)
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G16K06(FORUNFOR)
//

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```

//WWYSF10 JOB (WD24008AC30100X,WMB-01),ROZWODOSKI,TIME=15,REGION=450K 000000
// *NET ID=E18767,AB=F,NC=D,HC=1,RELFASE=(WWYSEN0) 000000
// *MAIN CLASS=NMCPRI 000000
// JDBLIB DD DSN=W.NWS.W323.YS.G16K06,DISP=SHR 000000
// DD DSN=W.NWS.W323.YS.LOADO,DISP=SHR 000000
// *MAIN LINES=20 000000
// *FORMAT PR,DDNAME=,DFST=WWB29 000000
// HUFCAF EXEC PGM=SMHUFCAF,PARM='10' 000000
// FT06F001 DD SYSOUT=A 000000
// FT04F001 DD DSN=W.NWS.W323.YS.HUANL00,DISP=SHR 000000
// FT10F001 DD DSN=&SMHUFANL,DISP=(NEW,PASS),UNIT=SYSDA,SPACE=(TRK,76), 000000
// DCB=(RECFM=VST,LRECL=9604,BLKSIZE=9608) 000000
// YLN EXEC PGM=SMYLN16 000000
// FT05F001 DD * 000000
L41011
/*
//FT06F001 DD SYSOUT=A 000000
//FT10F001 DD DSN=&SMHUFANL,DISP=(OLD,PASS) 000000
//FT11F001 DD DSN=W.NWS.W323.YS.SMCFYLN,DISP=SHR 000000
//FT14F001 DD DSN=W.NMC.TEST.SMFTX30(YNSCUT),LABEL=(,,IN),DISP=SHR 000000
// * CREATE FORMATTED SPECTRAL FILE 000000
c //FOR1 EXEC PGM=FORUNFOR 000000
//FT06F001 DD SYSOUT=A 000000
//FT05F001 DD * 000000
/*
//FT01F001 DD DSN=W.NWS.W323.YS.SMCFYLN,DISP=SHR 000000
//FT02F001 DD DSN=YLN,UNIT=TAPE9,VOL=SER=E18767,LABEL=(10,SL,,OUT), 000000
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(NEW,PASS) 000000
// * CREATE UNFORMATTED SPECTRAL FILE 000000
//FOR2 EXEC PGM=FORUNFOR 000000
//FT06F001 DD SYSOUT=A 000000
//FT05F001 DD * 000000
/*
//FT01F001 DD DSN=YLN,UNIT=TAPE9,VOL=SER=E18767,LABEL=(10,SL,,IN), 000000
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS) 000000
//FT02F001 DD DSN=&SMCFYLN,DISP=(NEW,PASS),UNIT=SYSDA, 000000
// SPACE=(TRK,(100,5)), 000000
// DCB=(RECFM=VST,LRECL=1000,BLKSIZE=1004,DSORG=PS) 000000
// * CREATE UNFORMATTED DRAG AND SST FILE 000000
e //FOR3 EXEC PGM=FORUNFOR 000000
//FT06F001 DD SYSOUT=A 000000
//FT05F001 DD * 000000
/*
//FT01F001 DD DSN=DRAGSST,UNIT=TAPE9,VOL=SER=E18767,LABEL=(03,SL,,IN), 000000
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS) 000000
//FT02F001 DD DSN=&DRAGSST,DISP=(NEW,PASS),UNIT=SYSDA, 000000
// SPACE=(TRK,(100,5)), 000000
// DCB=(RECFM=VST,LRECL=1000,BLKSIZE=1004,DSORG=PS) 000000
//SMI EXEC PGM=SMI1606G 000000
//FT05F001 DD * 000000
L51118
/*
//FT06F001 DD SYSOUT=A 000000
//FT15F001 DD DSN=ZLN16F2,UNIT=TAPE9,VOL=SER=E18767,LABEL=(02,SL,,IN), 000000
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=6400),DISP=(OLD,PASS) 000000
//FT11F001 DD DSN=&SMCFYLN,DISP=(OLD,PASS) 000000
//FT18F001 DD DSN=W.NWS.W323.YS.SMCFO00A,DISP=SHR 000000
//GETMOD EXEC PGM=SMNNM1606 000000
//FT05F001 DD * 000000
12
/*
//FT06F001 DD SYSOUT=A 000000
//FT80F001 DD DSN=&NORMOD,DISP=(NEW,PASS),UNIT=SYSDA, 000000
// SPACE=(TRK,(200,5)), 000000
// DCB=(RECFM=VST,LRECL=1000,BLKSIZE=1004,DSORG=PS) 000000
//FCST12 EXEC PGM=SMF1606G 000000
//FT05F001 DD * 000000
8182021010124010615018001190016000202
/*
//FT06F001 DD SYSOUT=A 000000
//FT18F001 DD DSN=W.NWS.W323.YS.SMCFO00A,DISP=SHR 000000
//FT19F001 DD DSN=W.NWS.W323.YS.SMCFO00B,DISP=SHR 000000
//FT20F001 DD DSN=W.NWS.W323.YS.SMCF12A,DISP=SHR 000000
//FT21F001 DD DSN=W.NWS.W323.YS.SMCF12B,DISP=SHR 000000
//FT80F001 DD DSN=&NORMOD,DISP=(OLD,PASS) 000000
//FT16F001 DD DSN=&DRAGSST,DISP=(OLD,PASS) 000000
//FCST24 EXEC PGM=SMF1606G 000000
//FT05F001 DD * 000000
202122230001240106150000000000016
/*
//FT06F001 DD SYSOUT=A 000000
//FT20F001 DD DSN=W.NWS.W323.YS.SMCF12A,DISP=SHR 000000
//FT21F001 DD DSN=W.NWS.W323.YS.SMCF12B,DISP=SHR 000000
//FT22F001 DD DSN=W.NWS.W323.YS.SMCF24A,DISP=SHR 000000
//FT23F001 DD DSN=W.NWS.W323.YS.SMCF24B,DISP=SHR 000000
//FT16F001 DD DSN=&DRAGSST,DISP=(OLD,PASS) 000000
//POST24 EXEC PGM=SMP1606X 000000
//FT05F001 DD * 000000
0001016102212364650101
/*
//FT06F001 DD SYSOUT=A 000000
//FT21F001 DD DSN=W.NWS.W323.YS.SMCF12B,DISP=SHR 000000
//FT23F001 DD DSN=W.NWS.W323.YS.SMCF24B,DISP=SHR 000000
//FT64F001 DD DUMMY 000000
//FT65F001 DD DUMMY 000000
// 000000

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